Remarks

Claim 1, claims 21 to 25 inclusive, claim 27 and claims 34 to 37 inclusive are being prosecuted.

By this amendment the statements added earlier to the disclosure in the two paragraphs following page 2 line 21 and objected to as constituting mew matter have been deleted; claims 26 and 28 have been deleted and claims 34 to 37 have been amended to remove the matter objected to in the Office Action. All the other pending claims have been allowed.

It is believed that the disclosure does not contain any new matter relative to the application as originally filed and that the claims are all now fairly based on the application as originally filed. Thus it is believed that the present amendment complies with all the requirements of the Office Action that the application in condition for Allowance.

It is believed this application is now in condition for Allowance and such action is respectfully requested.

Respectfully submitted

C.A. Rowley (Reg. No 29, 781)

Agent for Applicant June 25, 2003

Telephone (613) 398 1409

Fax (613) 308 1446

Certificate of Transmission

I hereby certify that this correspondence is being facsimile transmitted to the United States Patent and Trademark Office (Fax no. (703) 872 9310)

on June 25, 2003

(Date)

Typed name of the person signing this certificate

Signature



6133981446

Please amend the paragraph (as amended) beginning page 2 line 21 and the following paragraph as follows

Broadly the present invention relates to a fluidized bed system comprising a first fluidized bed, said fluidized bed being a conventional fluidized bed, means to feed solids into said first fluidized bed adjacent to a first end of said first fluidized bed and means to feed a first fluid into said first fluidized bed adjacent to a second end of said first fluidized bed, said second end being remote from said first end so that said solids and said first fluid flow in counter current, a second fluidized bed, said second fluidized bed being an entraining fluidized bed wherein a means for introducing solids and a means for introducing a second fluid into said second bed are both adjacent to the one end of said second fluidized bed so that said solids and said second fluid introduced into said second bed flow concurrently through said second bed from said one end toward another end of said second fluidized bed remote from said one end, first means connecting said first fluidized bed to said second fluidized bed adjacent to said second end of said first fluidized bed and said one end of said second fluidized bed and said first means connecting including said means to feed solids into said second fluidized bed, and second means connecting said first and said second fluidized beds adjacent said first end of said first bed and said other end of said second fluidized bed, [said first means connecting being adapted to form a hydraulic seal between said first and second fluidized beds] and said second means connecting including said means to feed solids into said first fluidized bed.

Preferably said first and said second means connecting being adapted to form a hydraulic scal between said first and second fluidized beds



In the claims

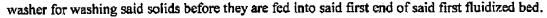
6133981446

1. (Previously Amended) A liquid-solid circulating fluidized bed system comprising a first liquid fluidized bed, means to feed solids into said first fluidized bed adjacent to a first end of said first fluidized bed and means to feed a first fluid into said first fluidized bed adjacent to a second end of said first fluidized bed, said second end being remote from said first end so that said solids and said first fluid flow in counter current, a second liquid fluidized bed, said second liquid fluidized bed being an entraining liquid fluidized bed wherein a means for introducing solids and a means for introducing a second fluid into said second bed are both adjacent to one end of said second fluidized bed so that said solids and said second fluid introduced into said second bed flow concurrently through said second bed from said one end toward another end of said second fluidized bed remote from said one end, first means connecting said first fluidized bed to said second fluidized bed adjacent to said second end of said first fluidized bed and said one end of said second fluidized bed, said first connecting means includes means to feed said solids into said second fluidized bed, second means connecting said first and said second fluidized beds adjacent said first end of said first bed and said other end of said second fluidized bed, said first means connecting includes means forming a packed moving bed dynamic seal between said first and second fluidized beds and said second means connecting includes said means to feed solids into said first fluidized bed.

Claims 2 to 20 inclusive have been deleted.

- 21 (Previously added) A liquid-solid circulating fluidized bed system as defined in claim 1 wherein said first and second liquid fluidized beds are substantially vertical columns.
- 22. (Previously Amended) A liquid-solid circulating fluidized bed system as defined in claim 21 wherein said first end of said first fluidized bed is the top end, said second end of said first fluidized bed is the bottom end, said one end of the second fluidized bed is the bottom end and said other end of said second fluidized bed is the top end.
- 23 (Previously Amended) A liquid-solid circulating fluidized bed system as defined in claim 22 wherein said first fluid essentially flows upwards and said solids essentially flow downwards to form a counter current flow in said first fluidized bed, and wherein said second fluid and solids both essentially flow upwards concurrently in the second fluidized bed.
- 24 (Previously added) A liquid-solid circulating fluidized bed system as defined in claim 23 wherein second means connecting said first and said second liquid fluidized beds includes a





25 (Previously added) A liquid-solid circulating fluidized bed system as defined in claim 24 wherein said second means connecting said first and said second liquid fluidized beds further includes a separator means for separating solids from fluid and exhausting such separated fluid to provide separated solids.

Please cancel claim 26

26 (Previously added) A liquid-solid circulating fluidized bed system as defined in claim 24 wherein said second means connecting said first and said second liquid fluidized beds further includes a hydraulic seal between said first and second fluidized beds.

27 (Previously added) A liquid-solid circulating fluidized bed system as defined in claim 23 wherein said first means connecting said first and said second liquid fluidized beds includes a second washer for washing solids adjacent to said second end of said first fluidized before they are introduced into said second fluidized bed.

Please cancel claim 28

Claims 29 to 33 inclusive have been deleted.

34. (Currently Amended) A liquid-solid circulating fluidized bed system as defined in claim 1 wherein second means connecting said first and said second liquid fluidized beds includes a washer for washing said solids before they are fed into said first end of said first fluidized bed, and a separator means for separating solids from fluid and exhausting such separated fluid to provide separated solids; and a hydraulic seal between said first and second fluidized beds.

35. (Currently Amended) A liquid-solid circulating fluidized bed system as defined in claim 23 wherein second means connecting said first and said second liquid fluidized beds includes a washer for washing said solids before they are fed into said first end of said first fluidized bed, and a separator means for separating solids from fluid and exhausting such separated fluid to provide separated solids, and a hydraulic scal between said first and second fluidized beds.

36 (Currently Amended) A liquid-solid circulating fluidized bed system as defined in claim 34 wherein said first means connecting said first and said liquid second fluidized beds includes a second washer for washing solids adjacent to said second end of said first fluidized before they are introduced into said second fluidized bed, a separator means for separating solids from fluid and exhausting such separated fluid to provide separated solids.

37. (Currently Amended) A liquid-solid circulating fluidized bed system as defined in claim 35 wherein said first means connecting said first and said second liquid fluidized beds includes a

L2





second washer for washing solids adjacent to said second end of said first fluidized before they are introduced into said second fluidized bed; a separator means for separating solids from fluid and exhausting such separated fluid to provide separated solids.

Claims 38 to 45 inclusive have been deleted.